

Serial No. : 10/574,238  
Filed : March 30, 2006

IN THE CLAIMS:

Please amend the claims as follows:

1. (currently amended) A transmission ~~having~~ for  
transmitting a force comprising:

a first rotation shaft coaxially fixed to a first turning  
transmission wheel ~~and;~~

a second rotation shaft coaxially fixed to a second  
turning transmission wheel ~~which~~ where the first and second  
rotation shafts are arranged in parallel with each other;

a support shaft extended between the first turning  
transmission wheel and the second turning transmission wheel;

a reciprocal movement mechanism that moves the support  
shaft to a first location which is close to the first turning  
transmission wheel and the second turning transmission wheel  
or a second location which is away from the first turning  
transmission wheel and the second turning transmission wheel;

an intermediary transfer wheel formed on the support  
shaft rotatably and movably along a longitudinal direction of  
the support shaft;

an intermediary transfer wheel feeding device that drives  
the intermediary transfer wheel, the intermediary transfer  
wheel feeding device comprising a moving arm, a drive  
mechanism that drives the moving arm in the longitudinal  
direction along the support shaft, and a feeding member  
provided at an end of the moving arm that moves the



Serial No. : 10/574,238  
Filed : March 30, 2006

intermediary transfer wheel in the longitudinal direction along the support shaft; and

a control unit for controlling operations of the reciprocal movement mechanism and the intermediary transfer wheel feeding mechanism;

wherein the first rotation shaft is rotated by a power device, and a rotational force of which can be transmitted to the second rotation shaft with variable speed, ~~the transmission characterized in that;~~

wherein each of the first turning transmission wheel and the second turning transmission wheel is formed in a shape of a right circular cone or a right circular cone trapezoid and has an identical vertex angle, and a tapered side peripheral surface of each of the first turning transmission wheel and the second turning transmission wheel faces each other with a constant distance;

the support shaft is arranged between the side peripheral surface of the first turning transmission wheel and the side peripheral surface of the second turning transmission wheel such that it extends in the longitudinal direction along the side peripheral surface of the first turning transmission wheel and the side peripheral surface of the second turning transmission wheel; and

wherein when the support shaft is in the first location, the intermediary transfer wheel contacts with each of the side



Serial No. : 10/574,238  
Filed : March 30, 2006

peripheral surface of the first turning transmission wheel and the side peripheral surface of the second turning transmission wheel and is moveable in the longitudinal direction along the support shaft while maintaining the contact, and when the support shaft is in the second location, the intermediary transfer wheel separates from each of the side peripheral surface of the first turning transmission wheel and the side peripheral surface of the second turning transmission wheel.

2. (currently amended) ~~A transmission characterized in that:~~  
as defined in Claim 1, wherein the control unit receives brake information indicating control condition of a brake, accelerator information indicating acceleration condition by an accelerator, power information indicating the operational condition of a power system, and load information indicating a degree of load, thereby controlling operations of the reciprocal movement mechanism and the intermediary transfer wheel feeding mechanism based on the received information.

~~the intermediary transfer wheel is movable in the longitudinal direction along the support shaft by means of an intermediary transfer wheel feeding device;~~

~~the intermediary transfer wheel feeding device has a moving arm, a drive mechanism that drives the moving arm in the longitudinal direction along the support shaft, and a feeding member provided at an end of the moving arm that moves~~



Serial No. : 10/574,238  
Filed : March 30, 2006

~~the intermediary transfer wheel in the longitudinal direction  
along the support shaft.~~

3. (currently amended) A transmission ~~characterized in that:~~  
as defined in Claim 1, wherein the feeding member has a front  
feeding piece which faces a front surface of the intermediary  
transfer wheel and a rear feeding piece which faces a rear surface  
of the intermediary transfer wheel.

~~the support shaft is moveable by a reciprocal movement  
mechanism to locations close to or away from the first turning  
transmission wheel and the second turning transmission wheel;  
the intermediary transfer wheel contacts with the first  
turning transmission wheel and the second turning transmission  
wheel when the support shaft is located at the close location,  
and the intermediary transfer wheel is separated from the  
first turning transmission wheel and the second turning  
transmission wheel when the support shaft is located at the  
away location.~~